



Oral Technical Session: Fungicide Resistance 1

90-O

Characterization and management of *Botrytis cinerea* resistant to multiple fungicides.

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Botrytis cinerea Pers., is the most economically important pre- and post-harvest pathogen of strawberry. The main strategy to control the disease involves the application of different classes of fungicides despite that *B. cinerea* is considered a high-risk pathogen for resistance development. We collected 216 *B. cinerea* isolates from strawberry fields in the Carolinas during 2011 and determined in vitro fungicide sensitivity to seven different classes of fungicides currently used for gray mold control in the Southeastern United States. About 60% of all isolates were resistant to boscalid, pyraclostrobin and thiophanate-methyl and more than 40% and 15% were resistant to cyprodinil and fenhexamid, respectively. None of the isolates were resistant to fludioxonil and iprodione. Some isolates were resistant to five fungicides, each from a different chemical class. Resistance to boscalid, fenhexamid, pyraclostrobin and thiophanate-methyl was correlated with point mutations in the corresponding target genes (SdhB, erg27, cytb and B-tubulin). A regional resistance monitoring program was implemented to help growers determine location-specific resistance profiles.
Keywords: Fungus, Fruits-Nuts, Strawberry

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Blackleg in canola seed and dockage: Can it cause plant infections?

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Blackleg disease caused by *Leptosphaeria maculans* is one of the major diseases of canola in the world. The pathogen can infect all parts of the plant but mainly causes girdling at the stem base causing subsequent yield loss. This study assessed the level of blackleg infection in seed and dockage, the type of spores produced by dockage, and ability of seed and dockage to cause

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